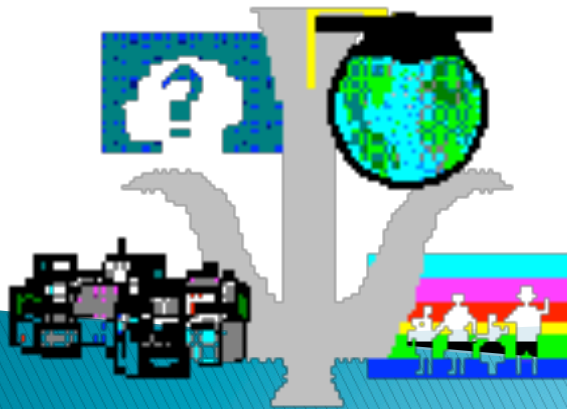


Interpreting Psychological Reports

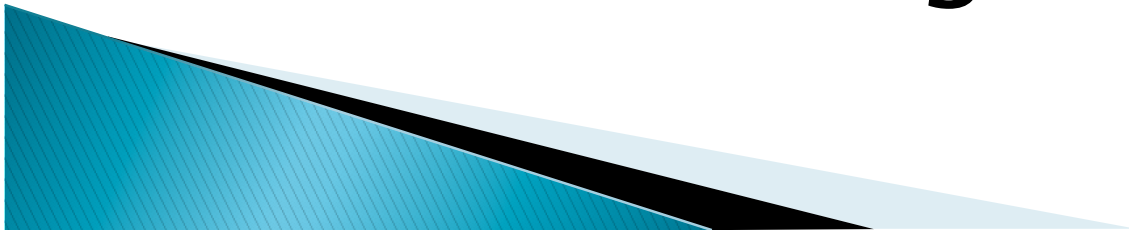
Halifax County Schools

December 2012

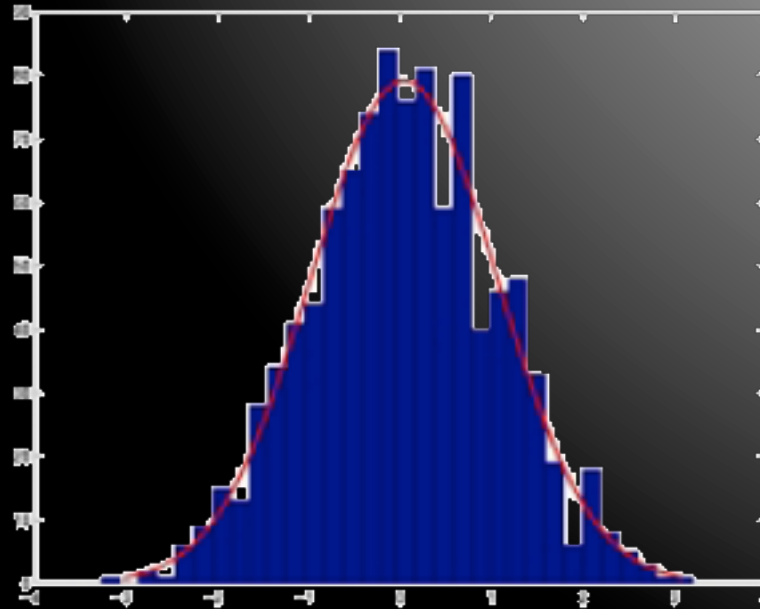


Psycho-educational Evaluation

- ▶ **Cognitive**
- ▶ **Achievement**
- ▶ **Visual-Motor**
- ▶ **Adaptive Behavior**
- ▶ **Behavior Checklists**
- ▶ **Autism Rating Scales**

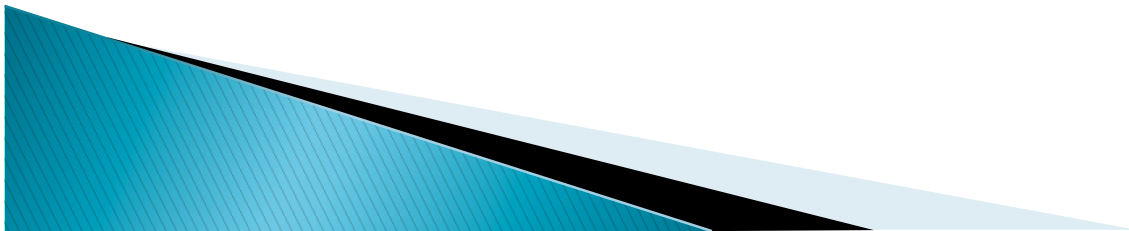


Standard Scores: What do they mean?



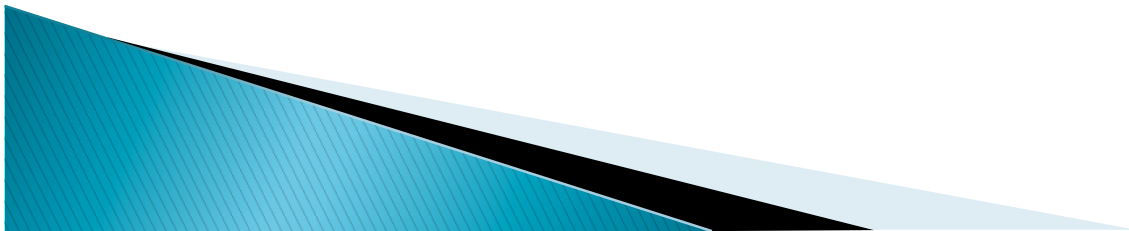
Norm referenced standardized tests...

- ▶ were developed to compare children to other same age children on various skills (usually at a national level)
- ▶ are administered in a STANDARD format to ensure consistency of results
- ▶ results indicate how far above or below average a child is on a skill which...shows where a child falls on the bell curve



Why are Standard Scores Helpful?

- ▶ Raw scores don't mean anything
- ▶ Children can be compared to other children on the bell curve
- ▶ Shows the individual child's pattern of strengths and weaknesses

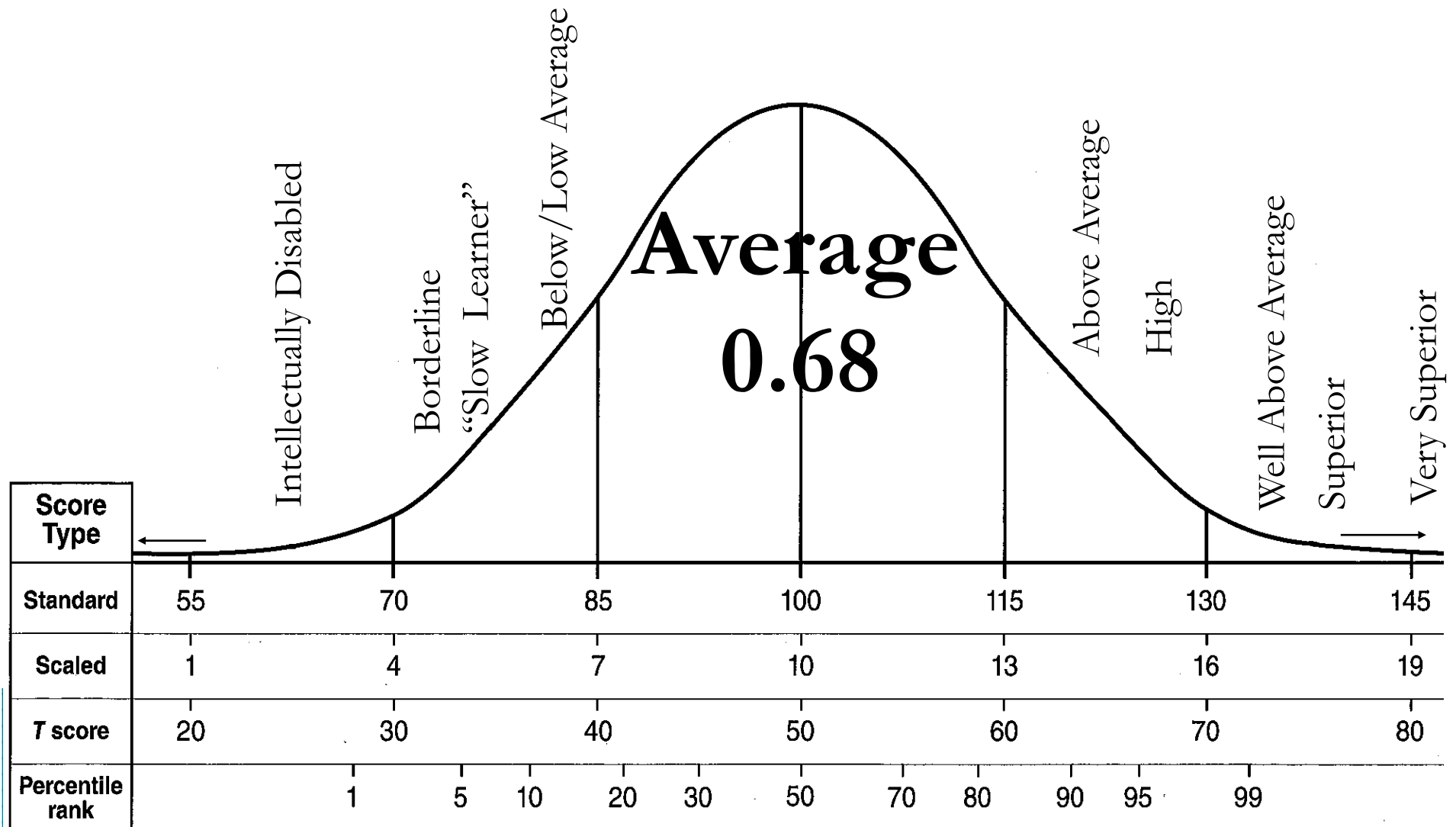


TYPES OF SCORES

- ▶ **Standard Score (SS)** Average=100
 - most commonly used score
 - what we think of as an “IQ” score
- ▶ **Percentile Rank (%)**
 - represents how well a student performed on a test compared to other children of the same age
 - “as well as or better than” ___ % of norm group
- ▶ **T-Scores** (a type of standard score) Average=50
 - DAS II subtests
 - most often used on behavior rating scales
- ▶ **Scale Scores** (a type of standard score) Average=10
 - most often used to represent subtests (Ex: WISC-IV subtests)

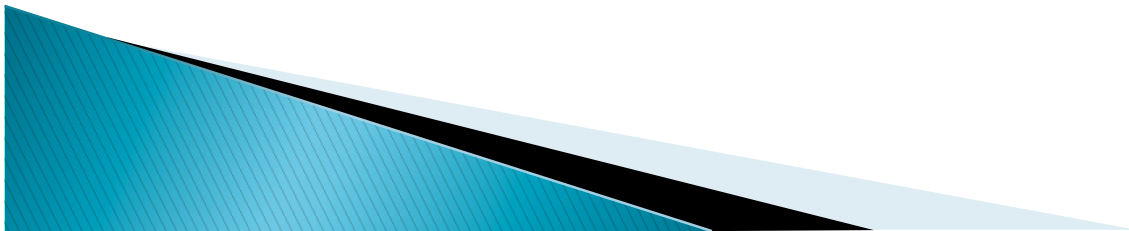


The Bell Curve



IMPORTANT

- ▶ Cognitive ability standard scores, or IQ, are the basis for comparison to all other areas in a psychoeducational profile
- ▶ “IQ” shows the “potential”...all other areas measured (e.g. achievement, adaptive behavior, etc.) should have SS which fall around the IQ score



Intelligence / Aptitude Tests

RAS

BATSHII

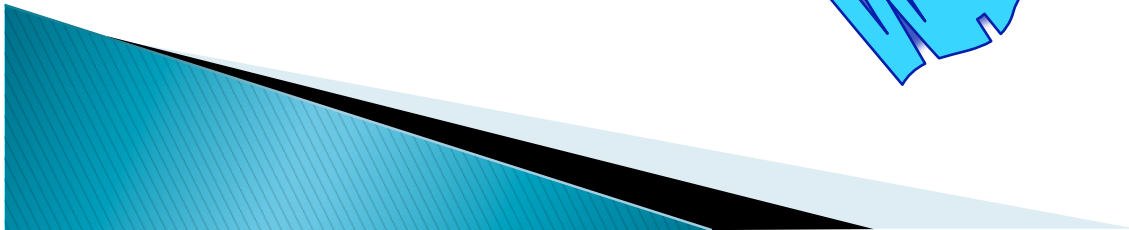
WACG

DASHI

WPPSHII

WASHI

WASHI



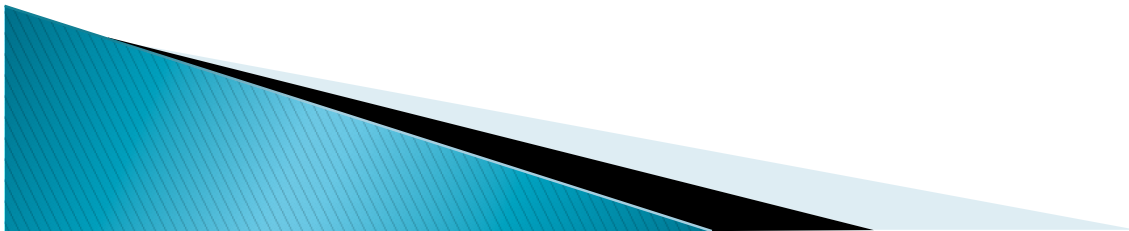
DISCLAIMER...

- ▶ Ability scores are not fixed. When tested again, some children exhibit increases or decreases in their cognitive ability score as a result of factors such as practice, fatigue, motivation, and/or testing conditions
- ▶ Significant changes may occur over time due to cognitive maturation, serious illness/injury, or intensive interventions
- ▶ Various ability measures have different areas of focus and formats



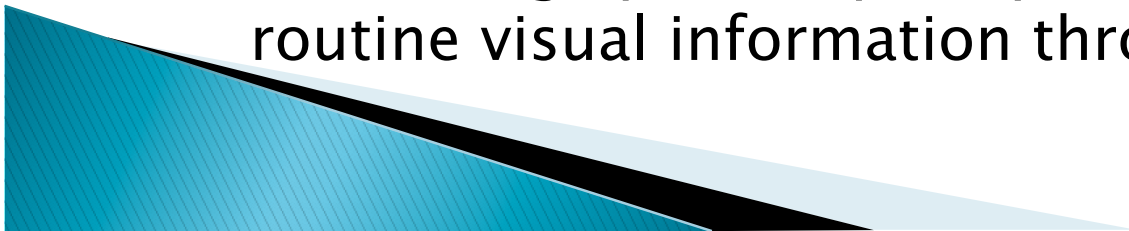
IQ Tests: Composites and Indexes

- ▶ Composite “IQ” score – general ability, all subtests included
- ▶ Index Scores – may include verbal, nonverbal, memory, processing speed, other factors
- ▶ Note – certain indexes may not be included in composite (diagnostic)

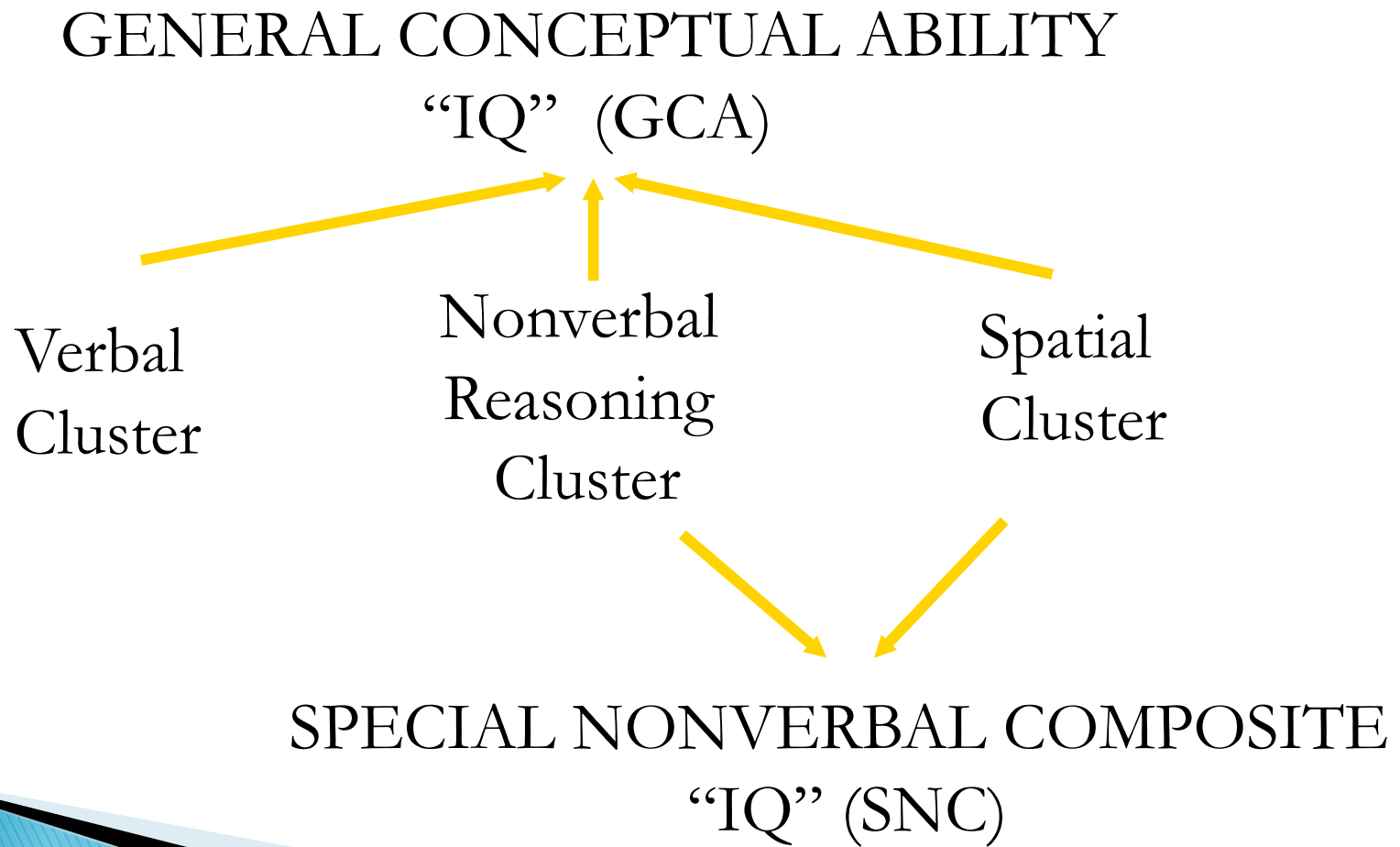


General Cognitive Abilities

- Verbal – verbal reasoning and knowledge, requires receptive and expressive language
- Nonverbal/Perceptual Reasoning – visual–spatial processing, ability to see and complete patterns
- Spatial – “hands on” visual–spatial
- Working Memory – ability to hold and manipulate information in immediate awareness
- Processing Speed – quickly and accurately process routine visual information through a rote task

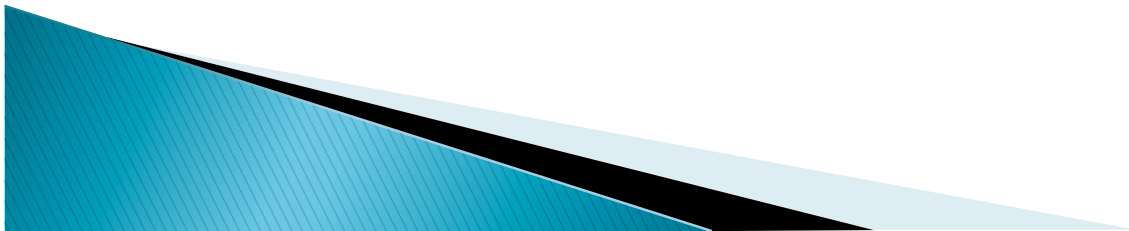


DAS-II “IQ” and Cluster Scores



DAS-II Cluster Subtests

- ▶ Verbal Cluster
 - Word Definitions
 - Similarities
- ▶ Nonverbal Cluster
 - Matrices
 - Sequential & Quantitative Reasoning
- ▶ Spatial Cluster
 - Recall of Designs
 - Pattern Construction



What each DAS-II Subtest helps to measure (not all inclusive)

VERBAL SUBTESTS

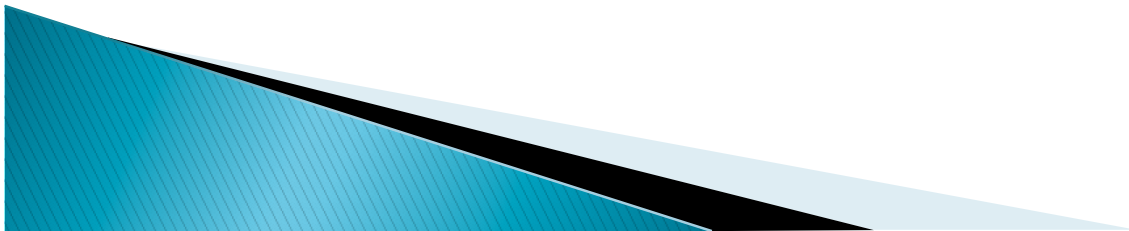
- ▶ **WORD DEFINITIONS:** expressive language, verbal knowledge both from education and from experience
 - “What does *encourage* mean?”
- ▶ **SIMILARITIES:** verbal reasoning, understanding of categories, abstract thinking skills
 - “In what way are BLUE and GREEN alike? How are they the same?”



Nonverbal Reasoning cluster subtests

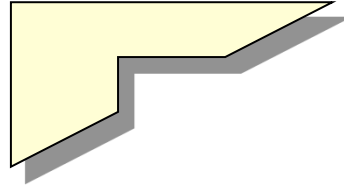
- ▶ **MATRICES:** visual perception, nonverbal reasoning, understanding of patterns and rules
- ▶ **SEQUENTIAL & QUANTITATIVE REASONING:** sequential patterning, perceiving relationships, basic math skills

X X O O X _ _



Spatial Cluster subtests

- ▶ **RECALL OF DESIGNS:** short term visual/spatial memory, visual perception, fine motor skills



- ▶ **PATTERN CONSTRUCTION:** visual spatial skills, visual motor integration, nonverbal reasoning



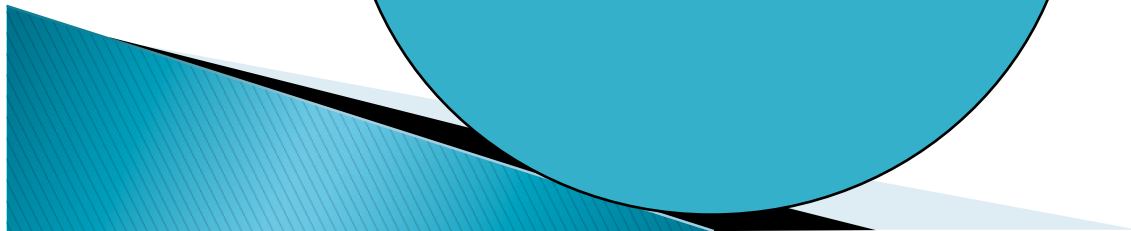
RIAS

Verbal

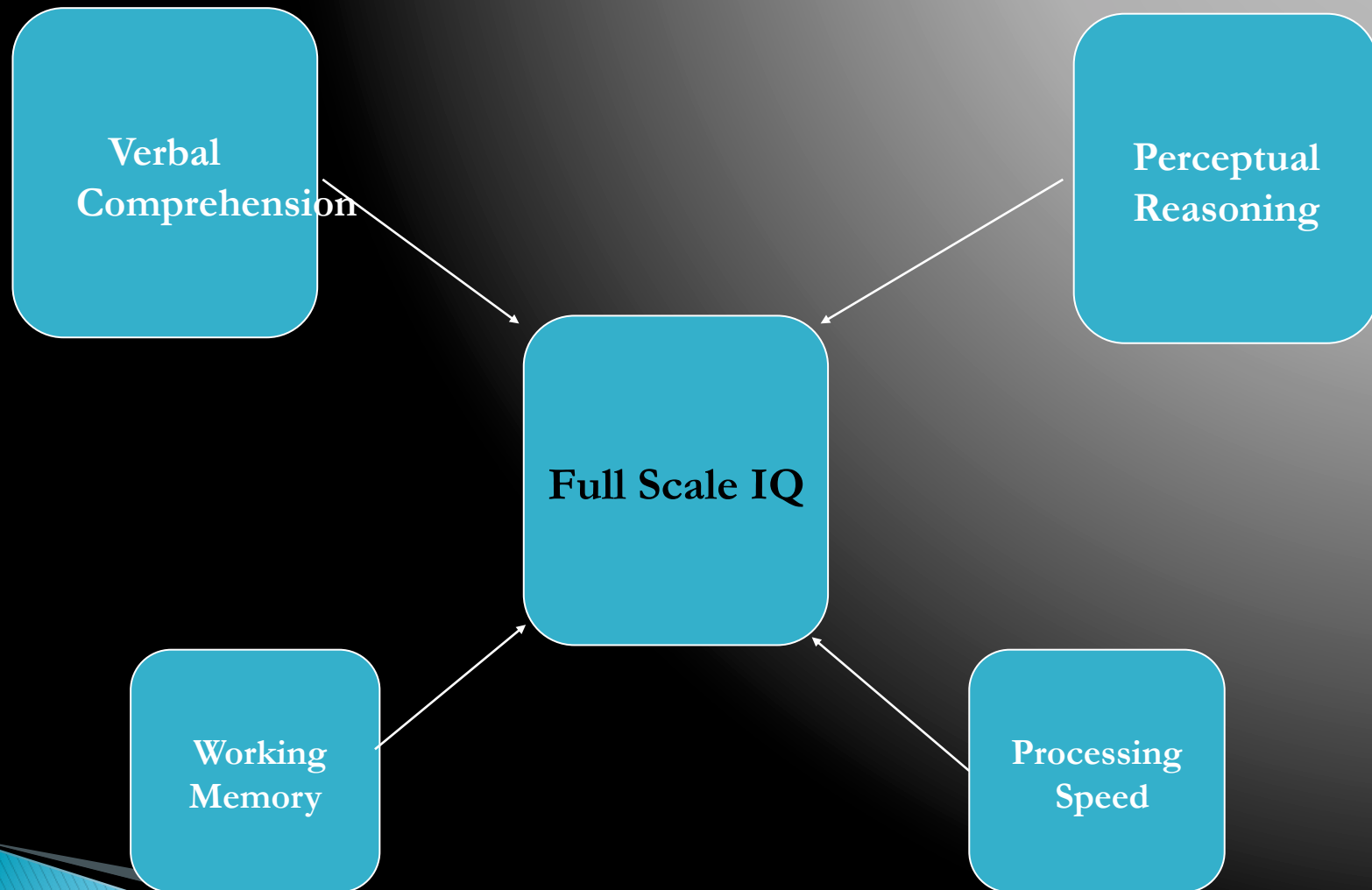
Composite
Intelligence
Index (IQ)

Memory

Nonverbal



Wechsler Intelligence Test for Children – IV



WISC–IV: Full Scale IQ and GAI

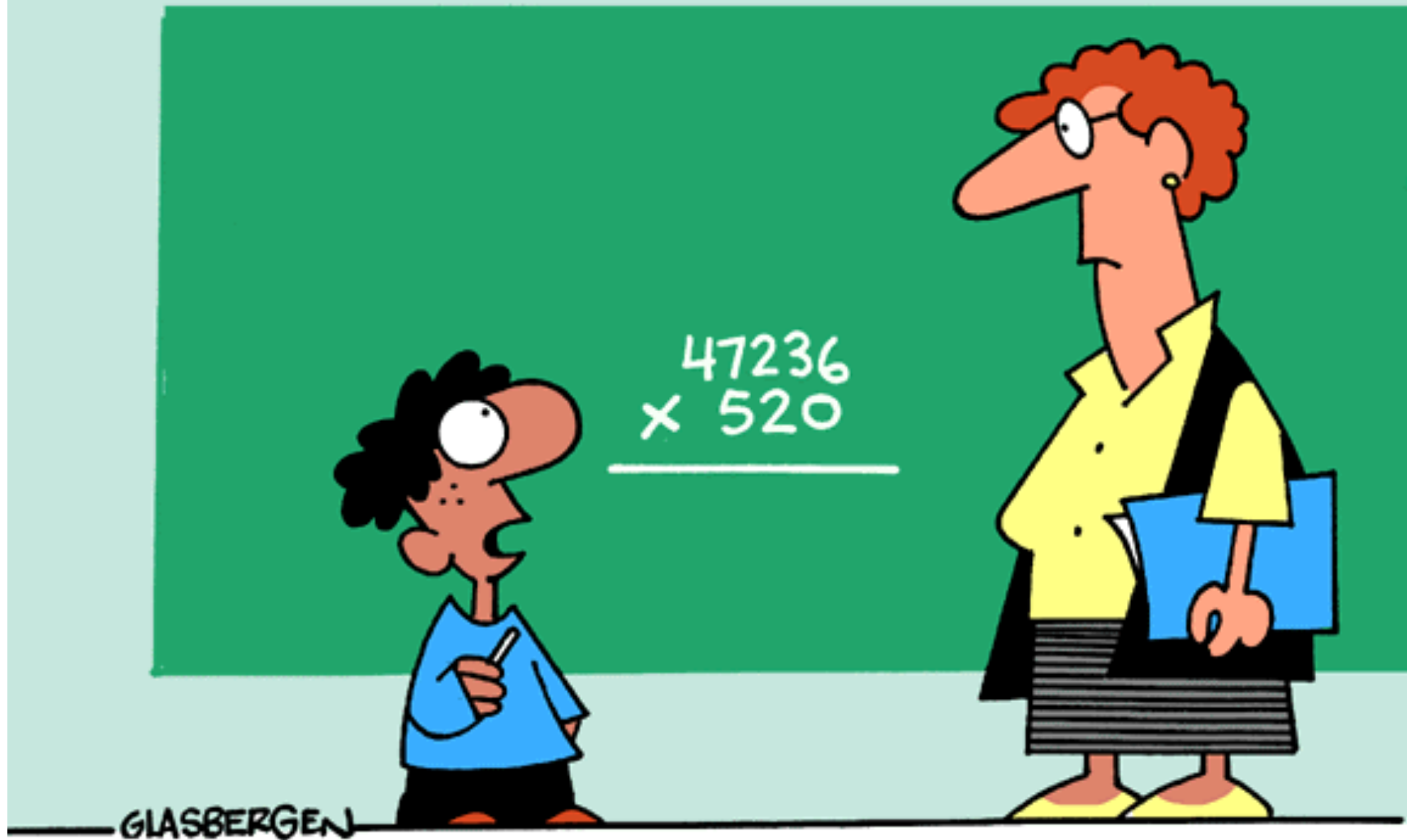
- Full Scale IQ (FSIQ) – measures overall intellectual ability, a composite of all 10 core subtests
- General Ability Index (GAI) – a composite of Verbal Comprehension and Perceptual Reasoning subtests
 - The GAI can be used as an alternative to the FSIQ under certain circumstances:
 - For example, when there is a statistically significant and unusual difference between VCI and WMI or between PRI and PSI
 - Can be used for discrepancy purposes without having to complete the alternative discrepancy portion of the DEC 3 SLD worksheet.





Q & A

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"AREN'T THERE ENOUGH PROBLEMS IN THE WORLD ALREADY?"

Achievement Tests

WIAT-III

GORT-4

TERA-3

TEMA-3

TOWRE

DATA-2

KTEA-II

DAB-3

WJ-III



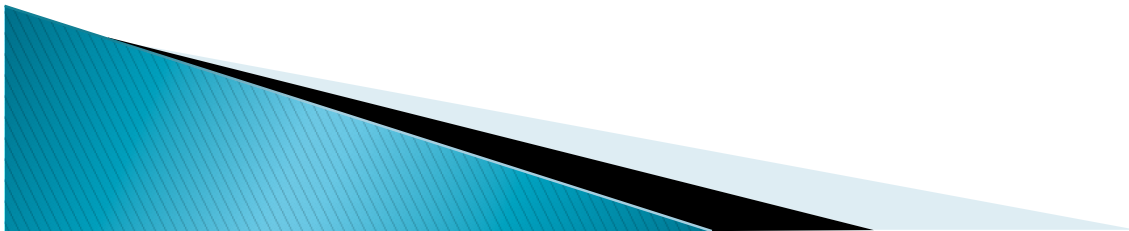
Achievement Tests: Skills Measured

- ▶ Early Reading Skills
 - Letter ID
 - Phonological awareness
 - Letter–Sound correspondence
- ▶ Basic Reading Skills
 - Letter–Word Identification
 - Word Attack/Nonsense word decoding
- ▶ Reading Comprehension
 - Passage comprehension
 - Reading vocabulary
 - Cloze comprehension
- ▶ Reading Fluency
 - Oral reading fluency
 - Word reading fluency



Achievement Tests: Skills Measured

- ▶ Math Calculation
 - Calculation
 - Math Fluency
- ▶ Math Reasoning
 - Problem-solving
 - Math concepts/application
- ▶ Written Language
 - Spelling
 - Sentence writing
 - Essay composition (may include conventions, mechanics)
- ▶ Oral Expression
- ▶ Listening Comprehension



Behavioral/Emotional Measures

CBCL

KFD

TRF

RCMAS

SSQ-R

DAP-SPED

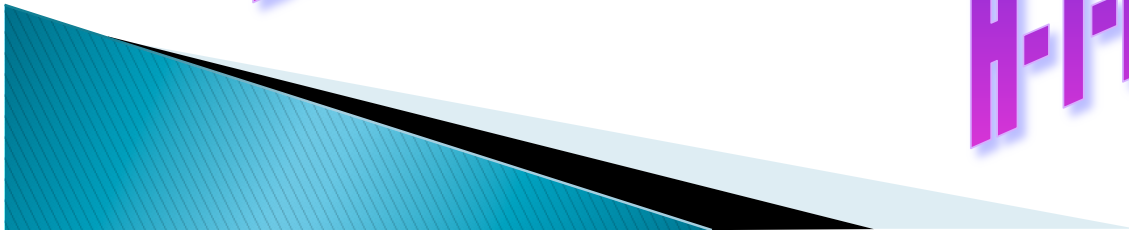
SSBS

BASC

CDI

ESI

H-T-P



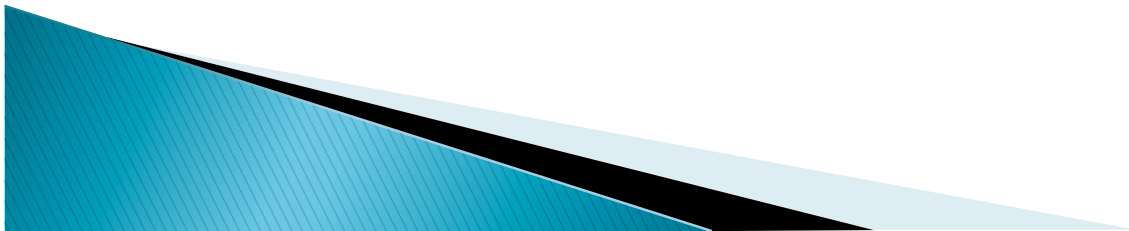
Behavioral/Emotional Measures

- ▶ Address the following areas through behavior rating scales (teacher/parent/self report):
 - Attention problems
 - Maladaptive Behavior
 - Externalizing Behavior
 - Hyperactivity/Impulsivity/Aggression/Conduct
 - Internalizing Behavior
 - Depression/Anxiety/Withdrawal



Behavioral/Emotional Measures

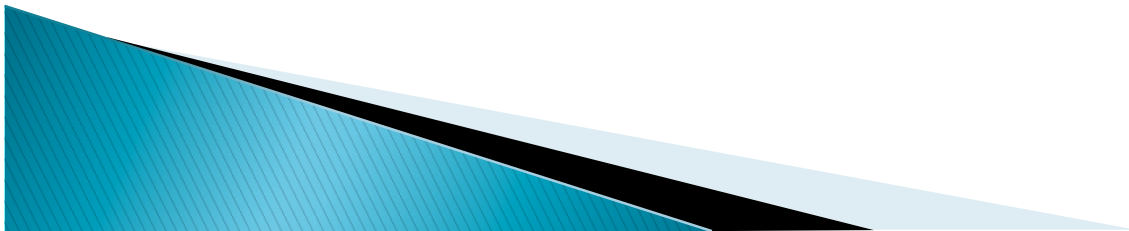
- ▶ Rating scales always viewed in conjunction with other available information / results
 - Observations
 - Teacher / parent input
 - Any other behavioral/emotional testing (e.g. projective measures)



Visual – Motor

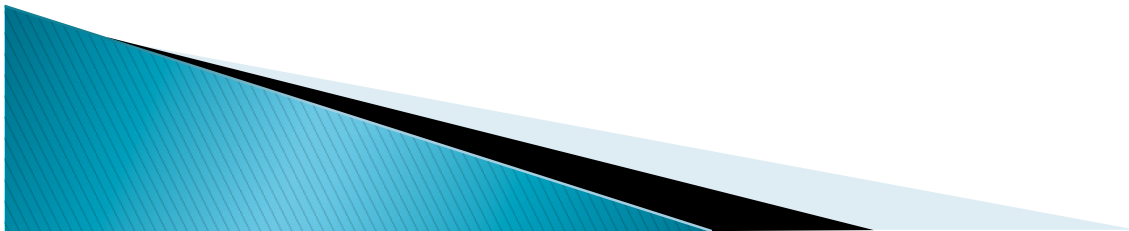
Bender-II

VMI-6



Visual–Motor Skills

- ▶ Assesses fine–motor skills, visual perception, and the ability to integrate the two.
- ▶ This is typically a motor screening in the psychoeducational report. For more detailed information, an occupational therapy assessment may be necessary.

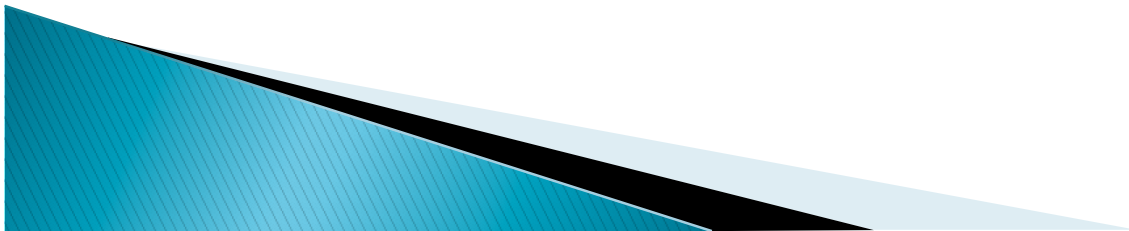


Adaptive Behavior

Vineland-II

ABAS-2

SIB-R



Adaptive Behavior

The ability to “function independently”

- ▶ Communication:

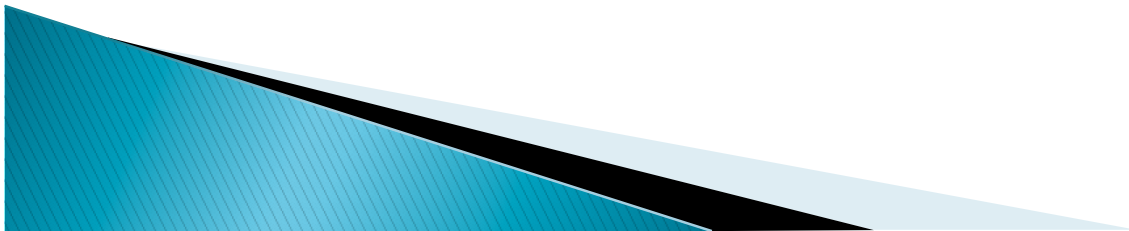
- Does child speak in full sentences? Does he listen to a story for at least 5 minutes?

- ▶ Daily Living Skills:

- Does child feed herself with a fork? Does she brush her teeth without assistance?

- ▶ Socialization:

- Does child show a desire to please his caregiver? Does he say please when asking for something?



Autism Rating Scales

- ▶ Can give an indication of whether a student may be on the autism spectrum.
- ▶ Should be used as one piece of information, along with results of psychoeducational assessment and observations.
- ▶ Addresses communication, social interaction, maladaptive behavior, restricted patterns of interest or behavior, sensorimotor issues.





Q & A

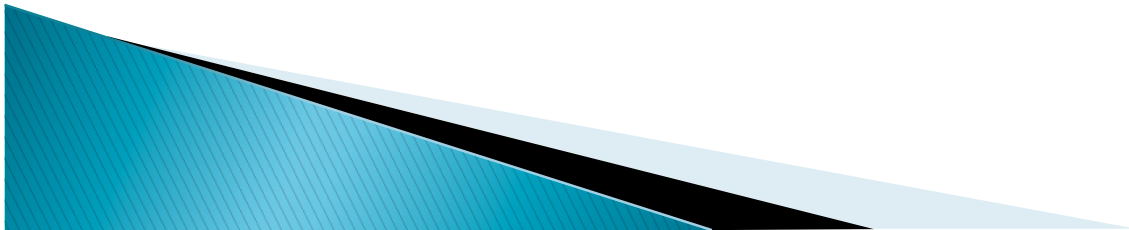
How to Read a Psychological Report





CONFIDENTIAL

*Information to be viewed only by
authorized persons!*



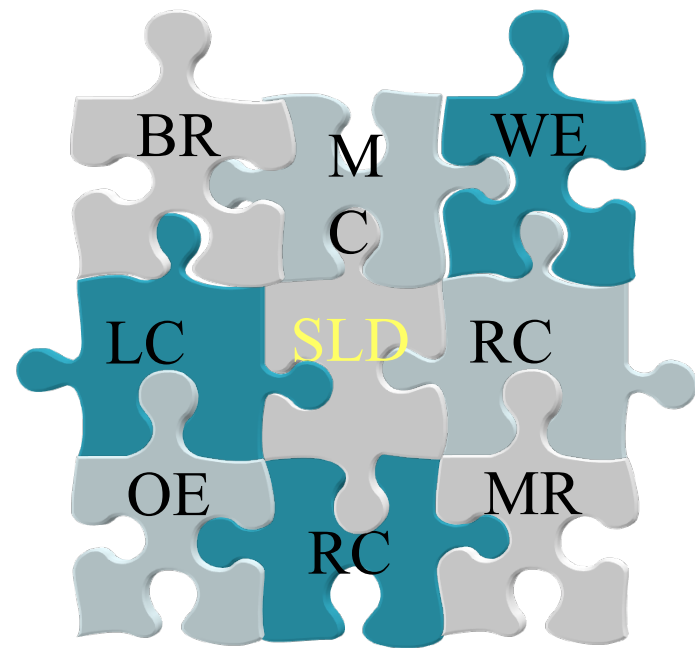
Psychoeducational Report

- ▶ Identifying Information
- ▶
- ▶ Assessment Measures
- ▶ Reason for Referral
- ▶ Background
- ▶ Behavior Observations
- ▶ Test Results and Interpretation
- ▶ Summary and Recommendations

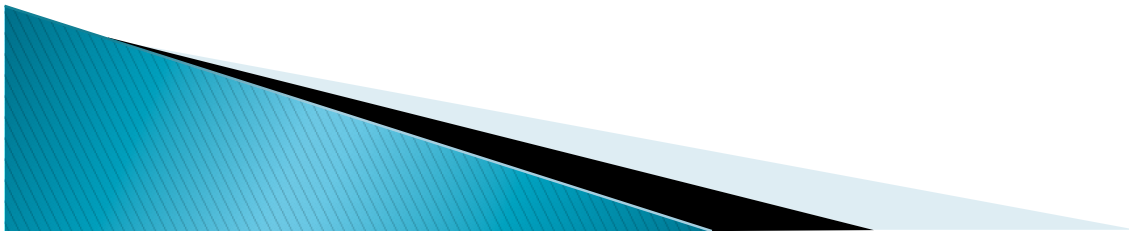


Making Placement Decisions:

What are the areas of a
“significant
discrepancy”?

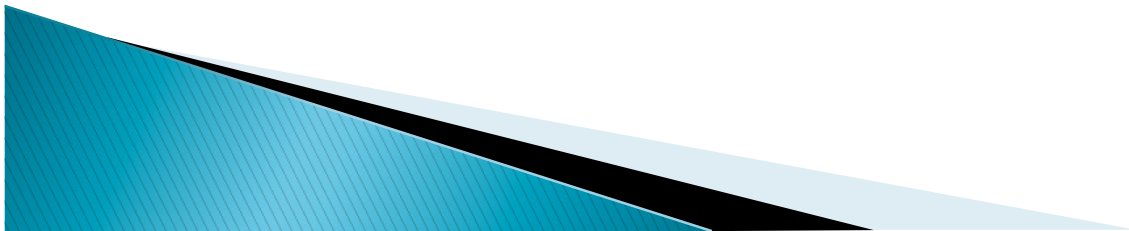


The North Carolina Department of
Public Instruction provides us with
guidelines governing Programs and
Services for Children with
Disabilities.




Specific Learning Disabled Students

- ▶ Discrepancy Model – Achievement measured in age standard score units is 15 or more points below intellectual functioning.
- ▶ Alternative to Discrepancy – Consider ALL available information (formal and informal) AND consult with your compliance specialist/EC Director



LD Areas

- Usually use 2 subtests to measure each area:

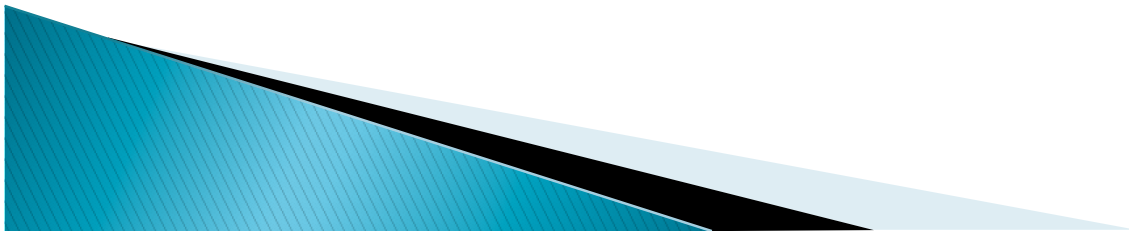
- ▶ Basic Reading
 - ▶ Reading Fluency
 - ▶ Reading Comprehension
 - ▶ Math Calculation
 - ▶ Math Reasoning
 - ▶ Written Expression
 - ▶ Oral Expression
 - ▶ Listening Comprehension
- 

AtD: Some Things to Think About

- ▶ Allows us to document why standardized tests may not adequately show a discrepancy. Can use other data, including grades and intervention data, as evidence

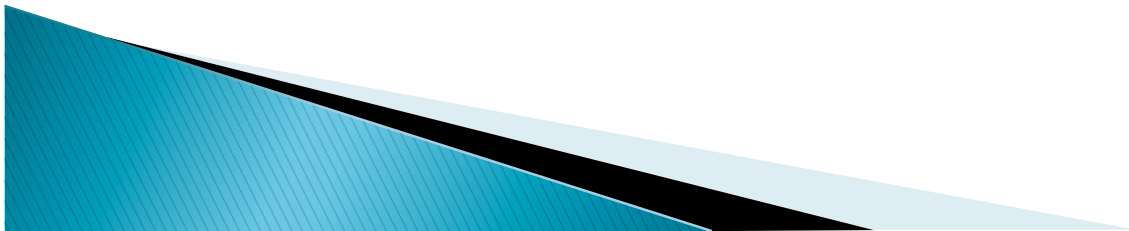
* Integrating psychoeducational assessment results with intervention and progress monitoring data is regarded as one of the most valid ways of determining who is most in need of specialized instruction.

- ▶ It's **not** a free pass for placing – the student must have interpretable differences within his/her test results as well as data showing he/she did not respond to interventions in the regular classroom.



More About Alternative to Discrepancy

- ▶ Is the student in K, 1st or 2nd grade?
 - It's harder to get the 15-point discrepancy in these grades, even if the student is struggling in the classroom.
- ▶ Has the student been retained?
- ▶ Has the student been struggling academically for a significant period of time (more than 1 academic year)?
- ▶ Are there significant strengths or weaknesses in the student's cognitive profile that may be contributing to some of the classroom difficulties?
 - Are there difficulties in working memory?
 - Is there a discrepancy between Verbal skills and reading achievement?
 - Are there weaknesses in a particular cognitive cluster that may be contributing to classroom difficulties?



Intellectually Disabled Students

- ▶ Intellectually Disabled – Mild
 - Intelligence Quotient = 55 to 70
 - +/– one standard error of measurement
- ▶ Intellectually Disabled – Moderate
 - Intelligence Quotient = 40 to 55
 - +/– one standard error of measurement
- ▶ Children scoring in overlapping areas between the [mild, moderate, severe] ranges shall be provided services in the least restrictive appropriate environment.



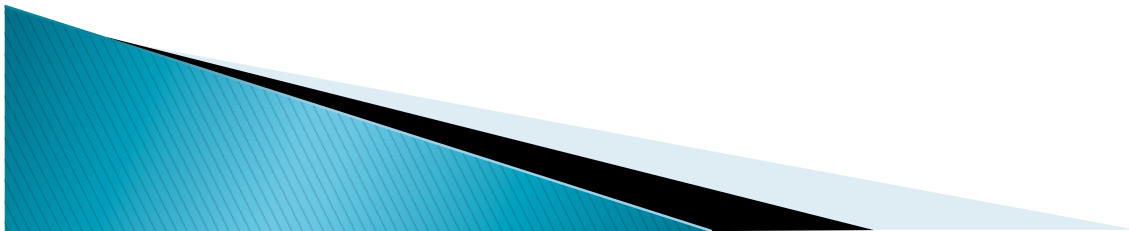
Slow Learners

- ▶ IQ between 85–70
- ▶ Often do not qualify for EC services but may be OHI or SED students.
- ▶ Effective instruction:
 - Repetition
 - Concrete – tangible, relevant
 - Generalization – link new info to previously learned
 - Engaging – small-group and computer-based instruction, games, little down time
 - Classroom management – prevent disciplinary problems.



REMINDER....

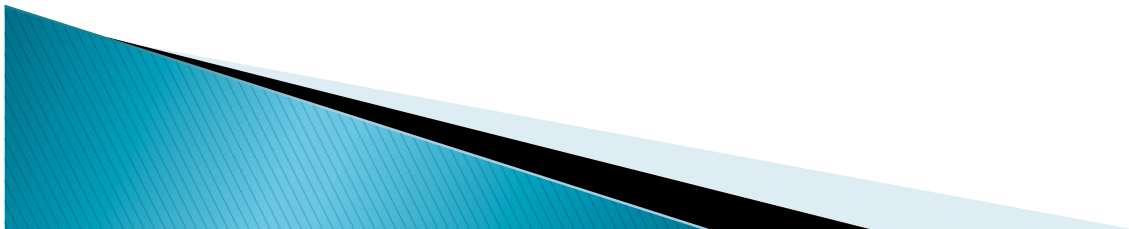
- ▶ Evaluation results represent a part of the IEP Team's efforts to collect and evaluate all relevant data on any student. Test scores alone should not be used to determine intellectual potential, academic functioning, etc., or eligibility for special programs without consideration of ALL other sources of information.
- ▶ The IEP Team has the final responsibility for making eligibility determinations.



CASE STUDY (Sarah)

<u>DAS II SCALES</u>	<u>STANDARD SCORE</u>	<u>PERCENTILE</u>
Verbal Cluster	79	8
Nonverbal Cluster	98	45
Spatial Cluster	92	30
General Conceptual Ability	90	25

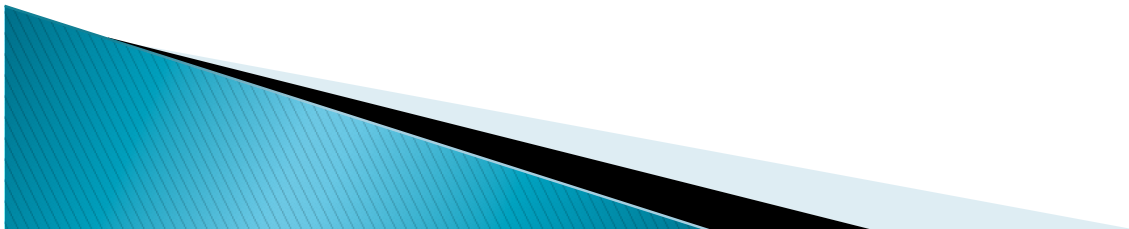
<u>WJIII COMPOSITES</u>	<u>STANDARD SCORE</u>	<u>PERCENTILE</u>
Basic Reading	72	3
Reading Comprehension	74	4
Math Calculation	84	14
Math Reasoning	70	2
Written Expression	65	1



CASE STUDY (Antonio)

<u>RIAS SCALES</u>	<u>STANDARD SCORE</u>	<u>PERCENTILE</u>
Verbal Intelligence Index	89	23
Nonverbal Intelligence Index	87	19
Composite Memory Index	72	3
Composite Intelligence Index	86	18

<u>WJIII COMPOSITES</u>	<u>STANDARD SCORE</u>
Basic Reading	79
Reading Comprehension	72
Math Calculation	82
Math Reasoning	79
Written Expression	84



REVIEW ACTIVITY:

Report Interpretation



Cognitive Profile: Implications for Instruction and Placement

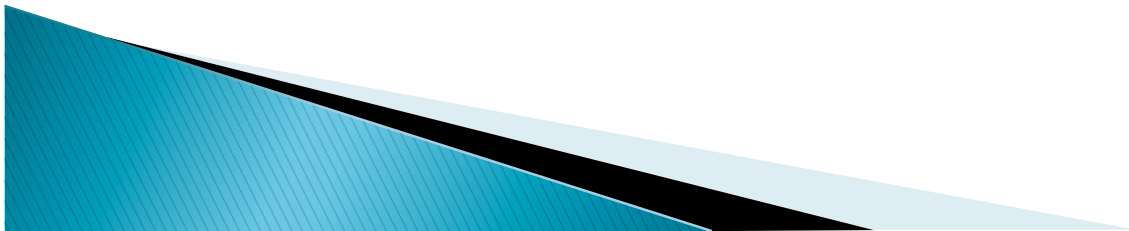
Nonverbal Strength / Verbal Weakness

- ▶ Multisensory instruction! Use visual aids, graphic organizers, color coding, flashcards, diagrams, outlines, hands-on materials, games etc. in conjunction with verbal instruction
- ▶ Model and demonstrate tasks
- ▶ Give concrete examples / Develop reference notebooks (e.g. math problems)
- ▶ Allow student to demonstrate learning in nonverbal ways (e.g. drawings, projects, acting out stories, etc.)



Nonverbal Strength / Verbal Weakness Continued

- ▶ Provide verbal enrichment activities
- ▶ May need longer response time to process verbal information
- ▶ Directions (do not assume understanding):
 - Use physical and eye contact prior directions
 - Pair gestures and written directions with verbal directions
 - Have student paraphrase directions
 - Multistep directions may need to be broken into single steps



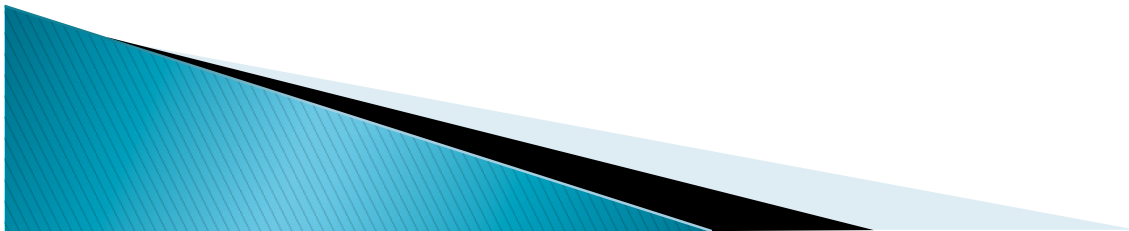
Verbal Strength / Nonverbal Weakness

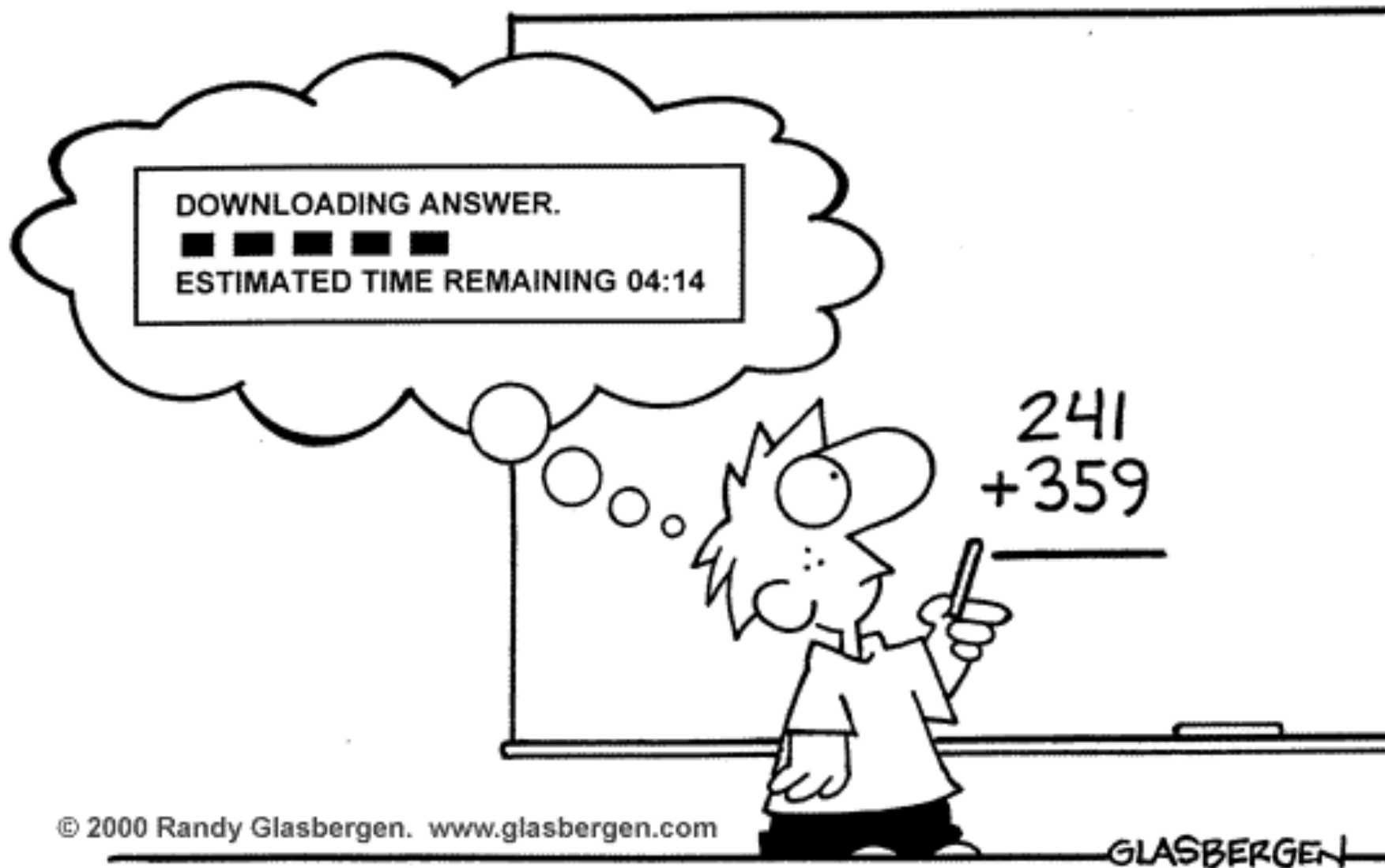
- ▶ Student may have difficulty processing nonverbal and mathematical information (e.g. diagrams, graphs, etc..)
 - Provide the student with extra assistance interpreting and creating graphs, charts, maps, and diagrams. Point out the important information and help the student find the necessary clues for interpretation. For example, when looking at a map, locate north/south/east/west or “you are here”.
 - Help the student visualize information by giving them familiar images. For example, when discussing fractions, help them imagine a pizza cut into slices.
- ▶ Provide visual structure (e.g. graph paper to work math problems, highlight lines to write between, etc.)
- ▶ Reduce the amount of information located on a page (e.g. less print, fewer problems, etc.).



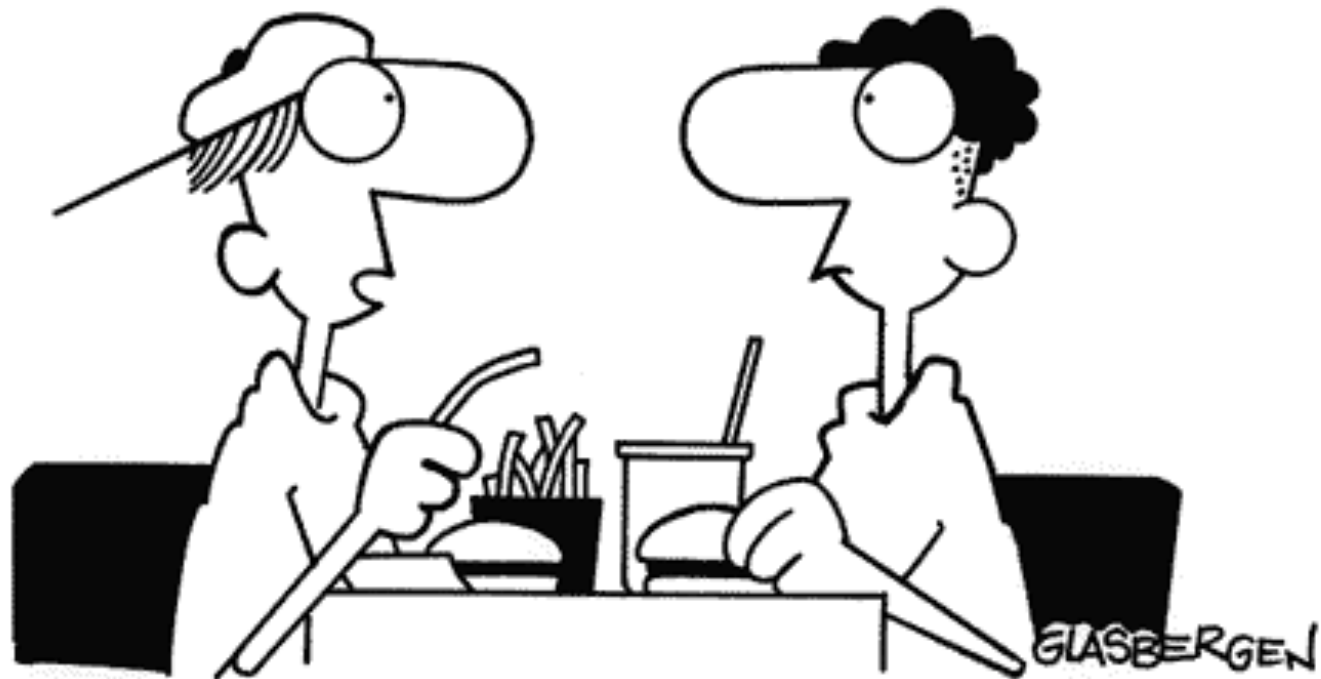
Verbal Strength / Nonverbal Weakness Continued

- ▶ Student may learn best through discussion. Review past information before presenting new concepts; verbally point out similarities, differences, and cause/effect relationships; indicate generalizations that can be drawn in various situations.
- ▶ Allow student to use self talk to problem solve
- ▶ Have student “teach” concepts to others





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**“I forgot to make a back-up copy of my brain,
so everything I learned last semester was lost.”**



Q & A

